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EXAMINER	
ADHAMI, MOHAMMAD SAJID	
ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/080,317	KURIHARA, KUNIAKI	
	Examiner	Art Unit	
	Mohammad S. Adhami	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-7 and 9-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-7,9-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- Applicant's amendment filed 6/28/2007 is acknowledged.
- Claims 1,3,4,6,7,9-12 have been amended.
- Claim 3 was previously cancelled.
- Claim 8 has been cancelled.
- Claims 13-15 have been added.
- Claims 1,2,4-7, and 9-15 are pending.
- Applicant's response and amendment with respect to the first office action rejections of claims 6-8 under 35 USC 101 has been noted and the rejection is withdrawn.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1,2,4-7, and 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 1,6, and 7:

It is unclear what the distinction between *a first set of information units* and *a second set of information units* is. In the context of the claim, it is unclear what *information* refers to. Is the information packets, codes about transmission, video and audio content, etc.? The limitations referring to information are vague and indefinite and therefore are confusing as written.

Re claim 2:

It is unclear what the distinction between *the first set of information packets* and *the second set of information packets* is.

Re claim 5:

Claim 5 recites the limitation "said second information" in line 1 of claim 5, "said second sets of said second units" in line 3, and "said first information or second information" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Re claims 9-12:

It is unclear what the distinction between *second packets* and *first packets* is. It is unclear what the *second packets* and *first packet* are.

The limitation *receiving information via second packets, which are created by dividing first packets, which are created by dividing received information* is vague and indefinite. The limitation appears cyclic, the received information is sent via second packets, which are made from first packets, which are made from received information, which are sent via second packets, so are the second packets made from themselves?

The claim recites *receiving second packets* without having received first packets.

There is insufficient antecedent basis for "said corresponding first packets" in lines 7-8 in the claims.

In the context of the claim, it is unclear what *information* refers to. Is the information packets, codes about transmission, video and audio content, etc.?

The limitation *assembling second packets into corresponding first packets before being divided* is confusing. Does the before refer to before second packets are divided or before first packets are divided? If it refers to before the first packets are divided, then does this mean the second packets assemble into the first packets? This appears to contradict the earlier limitation of the second packets being created by dividing first packets.

Re claims 4, and 13-15:

Claim 4 and 13-55 are rejected because they depend from rejected claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,2,6,7, and 13-15 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali in view of Tiernan (US 6,172,988).

Re claims 1,6, and 7:

Jalali discloses *transmitting first information to a transmission party* (Fig.1 ref.106).

Jalali further discloses *receiving information about the reception of the first information from the transmission party* (Fig.1 ref.104 and Fig.3 ref.312).

Jalali does not explicitly disclose *dividing information into a first set of information units and dividing the first set of information units into a second set of information units.*

Tiernan discloses *dividing information into a first set of information units and dividing the first set of information units into a second set of information units* (Fig.1 ref.34,30,and 32 where the output stream 34 is "information" and ref.30 shows "a first set of information units" and ref.32 shows "a second set of information units").

Jalali and Tiernan are analogous because they both pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include dividing individual first packets into individual second packets as taught by Tiernan in order to use a commonly known method of transmitting data over a network.

Re claim 2:

Jalali further discloses *using packets for transmission* (Abstract A transmitting terminal transmits signals in a form of packets to a receiving terminal).

Re claims 13-15:

Jalali discloses *clocking the time from when each unit of the first set of information units is transmitted* (Para.[0052] "the maximum number time for which a packet can remain in the first-time queue after the packet has been transmitted" where being able to know the time a packet has remained in a queue after being transmitted entails clocking the time for when the packet was first transmitted).

Jalali further discloses *determining whether or not the clocked time exceeds a reference value* (Fig.3 ref.316 and Para.[0052] "the parameters comprise, e.g., the maximum number of times a packet can be retransmitted and the maximum number time for which a packet can remain in the first-time queue after the packet has been transmitted").

Jalali further discloses *retransmitting a unit of the first set of information units when it is determined that the clocked time does not exceed a reference value* (Fig.3 ref.320).

Jalali further discloses *transmitting another unit of the first set of information when it is determined that the clocked time exceeds a reference value* (Fig.3 ref.318 where the first information is no longer transmitted, so the transmission of second information will begin).

Jalali further discloses *retransmitting the unit of the first set information units or transmitting another unit of the first set of information units, as disclosed above, when the transmission party indicates the unit of the first set of*

information has not been received (Fig.3 ref.312 where a NAK indicates the first information has not been received).

5. Claim 4 (as best understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali in view of Tiernan as applied to claim 1 above, and further in view of Tseung (US 5,109,384).

Re claim 4:

As discussed above, Jalali meets all the limitations of the parent claims.

Jalali does not explicitly disclose *setting a flag indicating that the clocked time exceeds the reference value.*

Tseung discloses *setting a flag indicating that the clocked time exceeds the reference value* (Col.22 lines 62 and 63 "The timer would expire (the ACK timer expired on network B flag 866 would be set) and " where the timer expires after a "reference value" is exceeded).

Jalali and Tseung are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include setting a flag indicating the clocked time has exceeded a reference value as taught by Tseung in order to make appropriate data processing decisions regarding the communication of multi-packet messages.

6. Claim 5 (as best understood) is rejected under 35 U.S.C. 103(a) as being unpatentable over Jalali in view of Tiernan and Tseung as applied to claim 4 above, and further in view of Hamilton (US 6,392,993) and Kamihara (US 6,854,020).

Re claim 5:

As discussed above, Jalali meets all the limitations of the parent claims.

Jalali does not explicitly disclose *writing the flag into the second information that is transmitted.*

Hamilton discloses *writing the flag into the second information that is transmitted* (Abstract "The positive reliability mode...sets [a]...flag in the packets transmitted" where setting the flag in the packets involves "writing" the flag and Table 3 in Col.11 lines 43-60).

Jalali and Hamilton are analogous because they both pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include writing a flag into the second information that is transmitted as taught by Hamilton in order to notify the receiver of the condition represented by the flag.

Jalali does not explicitly disclose *clearing the flag when all of the second packets are transmitted.*

Kamihara discloses *clearing the flag when all of the second packets are transmitted* (Col3 lines 55 and 56 "clearing the transmission-in-progress flag on

condition that packet transmission has ended" where after the transmission is complete, a flag is cleared).

Jalali and Kamihara are analogous because they all pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jalali to include clearing the flag after all the second packets are transmitted as taught by Kamihara in order to make appropriate data processing decisions regarding the communication of multi-packet messages.

7. Claims 9-12 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamilton in view of Knobel (US 6,765,871) and Tiernan (US 6,172,988).

Re claims 9-12:

Hamilton discloses *receiving second packets via a network* (Figure 8 reference 148).

Hamilton further discloses *storing, for each of a first corresponding packets, each of the second packets received* (Figure 8 reference 150 and Col.19 lines 32-37 "Since messages may have to be buffered until all packets are received, embodiments within the scope of this invention may comprise means for storing received packets until an entire message is received...such means is illustrated by message receive list 150").

Hamilton further discloses *assembling the second packets stored into each of the corresponding first packets before being divided* (Figure 8 reference

148 and Col.19 lines 29 and 30 "Normal processing of receiver 148 comprises assembling packets of a message").

Hamilton further discloses *determining whether or not a predetermined flag is contained in the second packets received* (Col.30 lines 64-66 "decision block 230 and step 232 which detected whether the ACK request flag is set" or Col.12 lines 50-52 "By examining the packet sequence number and, perhaps, the end of the message flag").

Hamilton further discloses *deleting the second packet that is stored and corresponds to the first packet, which is prior to another first packet whose corresponding second packets are determined to contain flags* (Col.24 lines 6-9 "If the entire message has not been received before the timer expires, then message life timer 158 may delete the partially received message" where as disclosed by the applicant in Figure 4, the flag is set when a packet that is to be transmitted, is processed after a reference time. So the "second packet" deleted is the packet corresponding to a message that was not entirely sent before the reference time. This is the same as deleting a partial message, which is composed of "second packets", that is not received within the reference time. The second packets corresponding to another first packet can also contain flags (Table 3)).

Hamilton discloses buffering packets *until* they are all received (Col.19 lines 32 and 33 "messages may have to be buffered until all packets are received"). However, Hamilton does not explicitly disclose *a deletion means*.

Knobel discloses *deleting the second packet that is stored when the second packets are assembled to reproduce the corresponding individual first packets* (Col.5 lines 47-51 "When a data frame has been sent to the buffer (i.e. a complete frame)...the other side [of the buffer] removes a complete frame" where a complete frame corresponds to the "first corresponding packet").

Hamilton and Knobel are analogous because they both pertain to data communications.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton as discussed above as taught by Knobel in order to efficiently utilize memory.

Hamilton further discloses *dividing first packets into second packets* (Fig.7 reference 124 where the "first packets" are messages and the "second packets" are the packets that make up the messages).

Hamilton suggests *creating first packets by dividing received information* (The data stream is "received information" that is divided into messages); however, Hamilton does not explicitly disclose *creating first packets by dividing received information*.

Tiernan discloses *creating first packets by dividing received information* (Fig.1 ref. 34,30 and 32 where the output stream 34 is "received information" and ref.30 shows the "first packets" and ref.32 shows the "second packets").

Hamilton and Tiernan are analogous because they both pertain to data transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hamilton to include creating first packets by dividing received information as taught by Tiernan in order to access data that is transmitted in a stream.

Response to Arguments

8. Applicant's arguments filed 3/29/2007 have been fully considered but they are not persuasive.

In the remarks on pg.12, Applicant contends the amendments clarify the first set of information units and the second set of information units.

The Examiner respectfully disagrees. The amendment does not clarify what the difference between a first set of information units and a second set of information units is. The second set of information units is made by dividing the first set of information units, but what is the difference between the information units.

In the remarks on pg.13, Applicant contends in Hamilton the plurality of packets (units) are not further subdivided into a corresponding second set of information units.

The Examiner respectfully disagrees. The Examiner is interpreting the messages to be the first set of information units and the packets to be the second set of information units (Fig.7 reference 124 where the messages are "first

packets" or "first set of information units) and the packets that make up the messages are the "second packets" or "second set of information units").

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad S. Adhami whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSA 9/5/2007

9/11/07

BRIAN NGUYEN
PRIMARY EXAMINER